

been attempted. However these procedures are potentially high risk. In many cases the only alternative is amputation. We ask whether the benefits justify the risks.

Using a prospectively compiled database we identified patients undergoing simultaneous aortoiliac and infrainguinal bypasses between January 1996 and January 2011 at a single district general hospital.

There were 38 multi-level procedures performed on 32 patients. Indication for surgery was acute ischaemia in 10 (26.3%), critical ischaemia without tissue loss in 10 (26.3%), with tissue loss in 10 (26.3%), and claudication in 2 (5.3%). In 26 (68.4%) cases inflow was restored using a direct aortoiliac or aortofemoral reconstruction. In the remaining 12 (31.6%) an extra-anatomic bypass was constructed. 1 (2.6%) patient died within 30 days of surgery. 36 (94.7%) patients survived to discharge. 34 patients (89.5%) were alive 1 year after surgery. Limb salvage was 97.3% at 30 days, 85.3% at 1 year and 76.7% at 5 years. In total 12 (35.3%) patients required at total of 21 further ipsilateral vascular procedures.

Our results demonstrate good long term results with acceptable levels of post-operative mortality.

#### 0627: PATIENTS FROM DIFFERENT SURGICAL SPECIALITIES HAVE A UNIQUE PROFILE OF PREDICTED MORBIDITY

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**Aim:** POSSUM scores have been extensively utilised as an audit tool to compare predicted with actual outcomes. 'Copeland's Risk Adjusted Barometer™' (CRAB) is a commercially available analysis tool which allows calculation of POSSUM risk profiles using validated surrogate markers. It is generally accepted that vascular surgery patients have a high frequency of co-morbidities however there is little data comparing predicted risk profiles of different surgical specialities. Data was analysed to compare predicted morbidity for vascular, colorectal, orthopaedic and general surgical procedures.

**Methods:** Central HES data for 8559 non day case procedures performed at a single district general hospital (March 2010 - August 2011) was analysed using CRAB software (Version 1.2.5.665). Procedures from each speciality were grouped as either: low risk (0–29% risk of complication), medium risk (30–69%) or high risk (70–100%).

**Results:** Vascular procedures tended to be high risk (25.2%, 30/119) compared to general (6.5%, 320/4932,  $p < 0.0001$ ), colorectal (10.5%, 70/594,  $p = 0.0004$ ) or orthopaedic surgery (8.8%, 250/2594,  $p < 0.0001$ ).

**Conclusions:** Vascular surgical procedures are at higher risk of POSSUM predicted morbidity than general, colorectal or orthopaedic procedures at this hospital. Individual specialities would appear to have unique profiles with respect to predicted complication risk.

#### 0634: DESIGN AND VALIDATION OF AN ERROR CAPTURE TOOL FOR QUALITY EVALUATION IN THE VASCULAR AND ENDOVASCULAR SURGICAL THEATRE

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**Introduction:** The unique and complex vascular/endovascular theatre environment is associated with significant risks of patient harm and procedural inefficiency. Evaluation is crucial to improve quality. This study attempted to design an efficient, reproducible tool for error capture and categorisation.

**Method:** Relevant published literature and field notes from over 250 hours of complex arterial surgery were analysed. A comprehensive log of errors was compiled and twelve vascular experts graded these for their potential to disrupt procedural flow and cause harm. This led to the development of the Imperial College Error CAPture (ICECAP) tool. ICECAP was validated (21 consecutive arterial cases) as an observer-led error capture record (two observers) and as a prompt for surgical teams.

**Results:** Six primary categories and 20 error sub-categories were determined as the most frequent and important vascular procedural errors. Using the ICECAP record, the number of errors correlated well between observers (Spearman  $\rho = 0.984$ ,  $p < 0.001$ ). Both observers correctly identified all moderate and severe errors and categorised these identically. Self-reporting without prompts identified 24.4% of errors, whereas surgical teams reported 69.7% of errors using ICECAP error-categories.

**Conclusion:** The ICECAP tool may be useful for capturing and categorising errors that occur during vascular/endovascular procedures and as an error recall prompt for self-reporting by vascular teams.

#### 0635: PREDICTING THE POST-OPERATIVE PATHWAY: DO CLINICAL TEAMS IN VASCULAR SURGICAL UNITS HAVE A SHARED MENTAL MODEL?

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**Aim:** To ascertain if surgeons, anaesthetists, ward doctors and nurses share a mental model of anticipated post-operative patient outcomes following major vascular surgery.

**Method:** The mental models of clinicians from two units were assessed, shortly after the surgery, by asking them to rate the likelihood of patient complications in the first 72 hours post-operatively using a Likert scale. They also indicated their source(s) of information. Routine documentation was examined for information on patient outcomes. Kappa Analysis was used to measure agreement and Logistic Regression to analyse predictive value.

**Results:** 58 clinicians caring for 23 patients participated (97.5% response rate). Mental model agreement was moderate across the theatre team, but poor in the ward team and the team as a whole. Participants reported their views were informed from their own speciality's documentation. Prior experience and handovers were also important for the ward team. Only the nurses' mental model was predictive of patient outcomes ( $P = 0.009$ ).

**Conclusion:** Situation awareness is essential for post-operative planning, management and ultimately patient outcomes. These findings suggest that the shared mental model of key clinicians caring for post-operative vascular patients is incomplete. Further work is required to explore methods for sharing mental models across clinical teams.

#### 0710 – WINNER OF ASIT-ROULEAUX CLUB PRIZE: EVAR – PATIENT DECISION MAKING. HOW WELL INFORMED ARE YOUR PATIENTS?

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**Introduction:** EVAR technology is pushing the boundaries of medicine and patients are increasingly using the internet to obtain medical information. This study assesses the quality of medical websites with information on EVAR.

**Methods:** We searched the keywords "endovascular aneurysm repair" and "evar" in Google, Yahoo and MSN/Bing and the top 150 websites were evaluated. Exclusion criteria were irrelevant information, repetition or inaccessibility.

Readability was assessed using the Gunning-Fog Index (GFI, measure of years of schooling needed to understand content) and the Flesch Reading Ease Score (FRES, index rating-score/100). We then used the LIDA tool to assess the accessibility, usability and reliability of the websites.

**Results:** Twenty six websites were analysed: mean GFI=12.12, S.D.:1.98 showed the average website was similar to reading the Wall Street Journal. The mean FRES was 50.53 (S.D.:10.02), below the universally recommended target of 60–70.

The results of the LIDA medical website validation tool were; accessibility 76.85%, usability 60.23% and reliability 52.27%.

**Conclusion:** We have shown that readability scores of the websites are poor suggesting that they may not be clearly understood. In addition, we have found the reliability to be very variable and generally poor. It is essential that we guide and help patients identify reliable sources of information.

#### 0735: SUCCESSFUL PREDICTION OF ENDO-VEIN ABLATION (EVA) OF GREAT SAPHENOUS VEIN (GSV) OUTCOMES AND THE REQUIREMENT FOR STAB AVULSIONS WITH THE TOURNIQUET TRENDLENBERG TEST

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**Aims:** The aim of this study was to assess the predictive value of the tourniquet test for EVA of GSV outcomes and the requirement for stab avulsions.

**Methods:** 19 patients (10 men, 9 women) with GSV reflux and no short saphenous or deep system venous disease were prospectively recruited in the study; mean age 52 yrs (range 32–84). All patients presented with visible varicosities and skin changes; mean CEAP score was 3.36 (range 2–5). Pre-EVA,